

Attorney's Docket No.: 05542-516001
Client's Ref. No.: 7901/CMP

OFFICIAL COMMUNICATION FACSIMILE:

OFFICIAL FAX NO: (703) 872-9306

Number of pages including this page 4

RECEIVED
CENTRAL FAX CENTER
MAR 23 2005

Applicant : Birang et al.
Serial No. : 10/721,769
Filed : November 24, 2003

Art Unit : 2818
Examiner : David Nhu


Title : METHODS AND APPARATUS FOR POLISHING CONTROL

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Attached to this facsimile communication cover sheet is RESPONSE TO RESTRICTION REQUEST, faxed this 23rd day of March, 2005, to the United States Patent and Trademark Office.

Respectfully submitted,

Date: March 23, 2005


Tim H. Pham
Reg. No. 48,589

Fish & Richardson P.C.
500 Arguello Street, Suite 500
Redwood City, California 94063
Telephone: (650) 839-5070
Fax: (650) 839-5071

50267828.doc

NOTE: This facsimile is intended for the addressee only and may contain privileged or confidential information. If you have received this facsimile in error, please immediately call us collect at (650) 839-5070 to arrange for its return. Thank you.

Attorney's Docket No.: 05542-516001 / 7901/CMP

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Birang et al.
Serial No. : 10/721,769
Filed : November 24, 2003
Title : METHODS AND APPARATUS FOR POLISHING CONTROL

Art Unit : 2818
Examiner : David Nhu

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

RECEIVED
CENTRAL FAX CENTER
MAR 23 2005

RESPONSE TO RESTRICTION REQUIREMENT

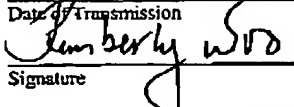
Responsive to the action mailed January 28, 2005, the applicant elects the invention of Group I drawn to the embodiment of a method for closed loop control in chemical mechanical polishing. The election is made with traverse.

The Examiner defined species based on claim limitations rather than embodiments disclosed in the specification. The application respectfully objects. M.P.E.P. Section 806.04(e) expressly provides that claims "*are never species*," and that species "*are always the specific different embodiments*." For at least this reason, the applicant respectfully submits that the restriction is improper.

The Examiner grouped into different species claims that are not mutually exclusive. The applicant respectfully objects. M.P.E.P. Section 806.04(f) expressly provides that "[c]laims to be restricted into different species must be mutually exclusive." That is, for two claims to be properly restricted to different species, one of the claims must recite limitations found in a first of the different species but not a second, and the other of the claims must recite limitations found in the second of the different species but not the first. In the restriction, there are claims that are not mutually exclusive but are nevertheless grouped in to different species. By way of example, claims 1 and 19 are not mutually exclusive because the former recites limitations that can be

CERTIFICATE OF TRANSMISSION BY FACSIMILE

I hereby certify that this correspondence is being transmitted by facsimile to the Patent and Trademark Office on the date indicated below.

Date of Transmission March 23, 2005

Signature Kimberly Woon
Typed or Printed Name of Person Signing Certificate

Applicant : Birang et al.
Serial No. : 10/721,769
Filed : November 24, 2003
Page : 2 of 3

Attorney's Docket No.: 05542-516001 / 7901/CMP

found in the species in which the Examiner has grouped the latter (i.e., Species II). Specifically, claim 1, recites a method that includes "measuring a dielectric thickness in an array of a first wafer from a plurality of wafers at a metrology station." This limitation is not exclusive to Species II, which, according to the Examiner, includes a measurement of a dielectric thickness in a first array. *See* Restriction Requirement, at paragraph 1.b) of page 2. For at least the above reasons, the applicant respectfully submits that the restriction is improper and, furthermore, does not concede that claims which the Examiner grouped in to different species are mutually exclusive. The applicant respectfully notes that limitations of the pending claims can be combinations and sub-combinations and refers the Examiner to M.P.E.P Section 806.05.

By his characterization of Species I, the Examiner appears to misconstrue the meaning of the terms "array" and "dielectric thickness." Apparently, the Examiner considers measuring a dielectric thickness in an array to be equivalent to measuring metal feature thickness at multiple points across a wafer. The applicant must respectfully disagree. An array is a region within a die where metal features are dense. *See, e.g.,* Applicant's Specification, p. 5, lines 11 and 12; FIG. 1. A dielectric thickness in an array is a thickness of a dielectric layer as measured at a point in an array. *See, e.g., id.*, at FIG. 5; p. 8, lines 5-8 (showing T1, which is an example of dielectric thickness in an array). A metal feature thickness is a thickness of a metal feature. *See, e.g., id.* (showing T4, which is an example of metal feature thickness). Thus, measuring dielectric thickness in an array is significantly different than measuring metal feature thickness at multiple point across a wafer. For example, a measurement of dielectric thickness in an array can consist of only a single measurement. In contrast, measuring metal feature thickness at multiple points across a wafer necessarily consists of at least two measurements. Moreover, the steps at issue measure different features. That is, one step measures dielectric thickness, and the other step measures metal feature thickness, which, as established above, is different than dielectric thickness. For at least the above reasons, the applicant respectfully submits that the restriction is improper and, furthermore, does not concede to the Examiner's construction of the claims.


Applicant : Birang et al.
Serial No. : 10/721,769
Filed : November 24, 2003
Page : 3 of 3

Attorney's Docket No.: 05542-516001 / 7901/CMP

Please apply \$120 for a one-month extension as well as any appropriate charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: March 23, 2005



Tim H. Pham
Reg. No. 48,589

Telephone: (650) 839-5070
Facsimile: (650) 839-5071

50260667.doc